

Claims

What is claimed is:

- [c1] A method of transmitting and recording digital data scrambled using a control word, the scrambled data being transmitted together with the control word, the method comprising:
 - encrypting the control word with a first key;
 - transmitting the encrypted control word;
 - receiving the encrypted control word and decrypting the control word with a decoder comprising an equivalent of the first key;
 - re-encrypting the decrypted control word with a second key stored in a portable support device adapted to be releasably received by the decoder, the portable support device adapted for use with a plurality of decoders; and
 - recording the re-encrypted control word and the scrambled digital data on a digital recording medium.
- [c2] The method of claim 1, wherein the portable support device comprises a smart card adapted to be releasably received by a smart card reader operatively coupled to the decoder.
- [c3] The method of claim 2, wherein the smart card comprises the equivalent of the first key.
- [c4] The method of claim 2, wherein the first key is separate from the second key that is stored on the smart card.
- [c5] The method of claim 2, wherein a single smart card is used to generate the re-encrypted control word for a plurality of recordings.

- [c6] The method of claim 2, wherein the smart card comprises credit units used to determine how many times the recorded digital data may be replayed.
- [c7] The method of claim 6, wherein the credit units are decremented after each playing of the recorded digital data.
- [c8] The method of claim 6, wherein the credit units are associated with a particular segment of the recording so that playing a selected segment of the recording decrements a selected number of credit units associated with that selected segment.
- [c9] The method of claim 6, wherein the credit units are decremented after the playing of any segment of the recording.
- [c10] The method of claim 1, wherein the portable support device comprises the digital recording medium, the second key being stored in a circuit disposed proximate the digital recording medium.
- [c11] The method of claim 10, wherein the circuit is embedded in a housing that encloses the digital recording medium.
- [c12] A method of transmitting and recording digital data scrambled using a control word, the scrambled data being transmitted together with the control word, the method comprising:
 - encrypting the control word with a first key;
 - transmitting the encrypted control word;
 - receiving the encrypted control word and decrypting the control word with a digital recorder comprising an equivalent of the first key;
 - re-encrypting the decrypted control word with a second key stored in a portable support device adapted to be releasably received by the digital recorder, the

portable support device adapted for use with a plurality of digital recorders;
and
recording the re-encrypted control word and the scrambled digital data on a digital
recording medium operatively coupled to the digital recorder.

- [c13] The method of claim 12, wherein the portable support device comprises a smart card adapted to be releasably received by a smart card reader operatively coupled to the digital recorder.
- [c14] The method of claim 13, wherein the smart card comprises the equivalent of the first key used to decrypt the control word decrypting the control word and the digital data.
- [c15] The method of claim 13, wherein the first key is separate from the second key that is stored on the smart card.
- [c16] The method of claim 13, wherein a single smart card is used to generate the re-encrypted control word for a plurality of recordings.
- [c17] The method of claim 13, wherein the smart card comprises credit units used to determine how many times the recorded digital data may be replayed.
- [c18] The method of claim 17, wherein the credit units are decremented after each playing of the recorded digital data.
- [c19] The method of claim 17, wherein the credit units are associated with a particular segment of the recording so that playing a selected segment of the recording decrements a selected number of credit units associated with that selected segment.
- [c20] The method of claim 17, wherein the credit units are decremented after the playing of any section of the recording.

- [c21] The method of claim 12, wherein the portable support device comprises the digital recording medium, the second key being stored in a circuit disposed proximate the digital recording medium.
- [c22] The method of claim 21, wherein the circuit is embedded in a housing that encloses the digital recording medium.
- [c23] An apparatus for transmitting and recording digital data scrambled using a control word, the scrambled data being transmitted together with the control word, the apparatus comprising:
a transmitter that encrypts the control word with a first key and transmits the encrypted control word;
a decoder that receives the encrypted control word and decrypts the control word;
and
a portable support device comprising a second key and adapted to be releasably received by the decoder, the decoder adapted to re-encrypt the decrypted control word using the second key and to record the re-encrypted control word and the scrambled digital data on a digital recording medium, the portable support device adapted for use with a plurality of decoders or digital recorders.
- [c24] The apparatus of claim 23, wherein the decoder comprises a digital recording device adapted to record the encrypted control word and digital data.